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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/534,078	02/08/2006	Gunter Jakel	JAKEL -1 PCT	5297

25889 7590 01/26/2007

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EXAMINER	
AZEMAR, GUERSSY	
ART UNIT	**PAPER NUMBER**
2613	

SHORTENED STATUTORY PERIOD OF RESPONSE	MAIL DATE	DELIVERY MODE
3 MONTHS	01/26/2007	PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

If NO period for reply is specified above, the maximum statutory period will apply and will expire 6 MONTHS from the mailing date of this communication.

Office Action Summary	Application No.	Applicant(s)	
	10/534,078	JAKEL, GUNTER	
	Examiner	Art Unit	
	Guerssy Azemar	2613	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *08 February 2006*.

2a)☐ This action is **FINAL**. 2b)☒ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1 and 2* is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *1 and 2* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☒ The drawing(s) filed on *14 May 2003* is/are: a)☐ accepted or b)☒ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☐ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☒ Information Disclosure Statement(s) (PTO/SB/08) Paper No(s)/Mail Date *05/06/2005*.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____.
5) ☐ Notice of Informal Patent Application
6) ☐ Other: _____.

DETAILED ACTION

Drawings

1. The drawings are objected to because figure 1 fails to show the name of the blocks on the drawings. Simply representing the components with numbers is not formal. Corrected drawing sheets in compliance with 37 CFR 1.121(d) are required in reply to the Office action to avoid abandonment of the application. Any amended replacement drawing sheet should include all of the figures appearing on the immediate prior version of the sheet, even if only one figure is being amended. The figure or figure number of an amended drawing should not be labeled as "amended." If a drawing figure is to be canceled, the appropriate figure must be removed from the replacement sheet, and where necessary, the remaining figures must be renumbered and appropriate changes made to the brief description of the several views of the drawings for consistency. Additional replacement sheets may be necessary to show the renumbering of the remaining figures. Each drawing sheet submitted after the filing date of an application must be labeled in the top margin as either "Replacement Sheet" or "New Sheet" pursuant to 37 CFR 1.121(d). If the changes are not accepted by the examiner, the applicant will be notified and informed of any required corrective action in the next Office action. The objection to the drawings will not be held in abeyance.

Claim Rejections - 35 USC § 112

2. The following is a quotation of the second paragraph of 35 U.S.C. 112:

> The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

3. Claim 2 is rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention. Claim 2 is an apparatus claim, and it cannot depend on the method claim of which it's claiming the actual structure. Furthermore the claim fails to further limit claim 1 on which it depends.

Claim Rejections - 35 USC § 103

4. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

5. Claim 1 is rejected under 35 U.S.C. 103(a) as being unpatentable over unpatentable over Kawasaki et al. (5,870,381).

(1) With respect to claim 1:

Kawasaki et al. teach a method for infrared data transmission between several transmitter units (S1, S2, S3 in figure 8A) and a common receiver station (column 2, lines 50 - 53), with the individual transmitter units transmitting the data to be transmitted in a blockwise manner (T in figure 8A) to the receiver station in a time interval with respect to each other (U1, U2, U3 in figure 8A, within the time span C, each transmitter transmit for U1 amount of time and pauses depending of the number of transmitter units), wherein the respective data blocks to be transmitted are transmitted repeatedly in a transmission interval of the same length for all transmitter units according to the maximum number of transmitter units (C in figure 8A, all

transmitters transmit in time span C, and the repetition would vary relatively to the number of transmitters), with the length of the repetition intervals which differ for all transmitter units differing at least by twice the transmission time for a maximum data block size (Xs1, Xs2, Xs3 in figure 8A), and that the shortest repetition interval corresponds at least to the multiple of the double transmission time for a maximum data block size (Xs1 in figure 8A, the shortest repetition interval is more than double the maximum block size: 2*T << Xs1 in figure 8A).

However, Kawasaki et al. do not teach the multiple corresponds to the maximum number of transmitter units.

It is well known in the art that as the number of transmitters increase, one would have to decrease the repetition interval to accommodate all the transmitters while avoiding collision. Hence, it would have been obvious as a matter of design choice to use different interval for time span with respect to all transmitter units, since that interval depends on the number of transmitter units. In doing so, the transmission would be done without interference of the signals.

6. Claim 2 is rejected under 35 U.S.C. 103(a) as being unpatentable over unpatentable over Heep et al. (5,331,450) in view of Kawasaki et al. (5,870,381).

Heep et al. teach a device for infrared data transmission between several transmitter units and a common receiver station (see abstract), with the transmitter units being associated on the one hand with memories for the data combined in a data block to be transmitted (644 in figure 6) and on the other hand with a control unit

connected to timing elements for reading out the transmitted data blocks from the memories (610 in figure 6, flowchart of the functions of the control logic).

However, Heep et al. do not teach the transmitted data blocks (d) can be read out repeatedly within a send interval (T) predetermined with respect to its duration depending on the number of the transmitter units (1) in repetition intervals (i1 to i4) differing for each transmitter unit (1), which intervals extend step by step from a minimum interval (i1) depending on the number of the transmitter units (1) and the double transmission time for a data block by at least the double transmission time for a data block.

Kawasaki et al. teach the transmitted data blocks (d) can be read out repeatedly within a send interval (T) predetermined with respect to its duration depending on the number of the transmitter units (1) in repetition intervals (i1 to i4) differing for each transmitter unit (1) (U1, U2, U3 in figure 8A, within the time span C, each transmitter transmit for U1 amount of time and pauses depending of the number of transmitter units), which intervals extend step by step from a minimum interval (i1) depending on the number of the transmitter units (1) (U1 in figure 8A) and the double transmission time for a data block by at least the double transmission time for a data block (Xs1, Xs2, Xs3 in figure 8A).

Therefore it would have been obvious to one of ordinary skill in the art at the time of the invention to use the transmission of data blocks in repetition intervals as taught by Kawasaki et al. in the transmission device taught by Heep et al. because it provides

a way to accommodate several transmitter units and will vary depending on the number of those units.

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Guerssy Azemar whose telephone number is (571) 270-1076. The examiner can normally be reached on Mon-Fri (every other Fridays off).

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Kenneth Vanderpuye can be reached on (571) 272-3078. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

Guerssy Azemar

KENNETH VANDERPUYE
SUPERVISORY PATENT EXAMINER

12/16/2006